OMB Number: 4040-0001 Expiration Date: 12/31/2022

SF 424 (R&R)	3. DATE RECEIVED BY STATE State Application Identifier					
1. TYPE OF SUBMISSION	4. a. Federal Identifier N00014					
Pre-application Application Changed/Corrected Application	b. Agency Routing Identifier 311 [Simpson, Michael]					
2. DATE SUBMITTED Applicant Identifier						
10/08/2021 A172888_APL-UW_Jessup	c. Previous Grants.gov Tracking ID					
5. APPLICANT INFORMATION	Organizational DUNS: 6057994690000					
Legal Name: University of Washington						
Department: Office of Sponsored Programs Division:						
Street1: 4333 Brooklyn Ave NE						
Street2: Box 359472						
City: Seattle County / Paris	h: _{King}					
State: WA: Washington	Province:					
Country: USA: UNITED STATES	ZIP / Postal Code: 98195-9472					
Person to be contacted on matters involving this application						
Prefix: Ms. First Name: Carol	Middle Name:					
Last Name: Rhodes	Suffix:					
Position/Title: Director						
Street1: 4333 Brooklyn Ave NE						
Street2: Box 359472						
City: Seattle County / Paris	sh: _{King}					
State: WA: Washington	Province:					
Country: USA: UNITED STATES	ZIP / Postal Code: 98195-9472					
Phone Number: 206-543-4043 Fax Number: 206-6	685-1732					
Email: osp@uw.edu						
6. EMPLOYER IDENTIFICATION (EIN) or (TIN): 91-6001537						
7. TYPE OF APPLICANT: H: Public/State Co	ontrolled Institution of Higher Education					
Other (Specify):						
Small Business Organization Type Women Owned Social	lly and Economically Disadvantaged					
8. TYPE OF APPLICATION: If Revision, mark applications of the second of	ppropriate box(es).					
New Resubmission A. Increase Av	ward B. Decrease Award C. Increase Duration D. Decrease Duration					
Renewal Continuation Revision E. Other (spec	cify):					
Is this application being submitted to other agencies? Yes No W	hat other Agencies?					
	OG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 12.330					
	cience, Technology, Engineering & Mathematics (STEM) Rucation, Outreach and Workforce Program					
11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:						
DID-NOW: Developing an Inclusive and Diverse Naval Ocean 21-000000850)	nographic Workforce (White Paper Tracking Number:					
12. PROPOSED PROJECT: 13. CONGRESSIONAL DISTRICT	OF APPLICANT					
Start Date Ending Date						

14. PROJECT DIRECTOR/PRINCIPAL INVESTIGATOR CONTACT INFORMATION									
Prefix: Dr. First Name: Andrew	Middle Name: T.								
Last Name: Jessup	Suffix:								
Position/Title: Senior Principal Oceanographer									
Organization Name: University of Washington									
Department: Applied Physics Laboratory Division:									
Street1: 1013 NE 40th Street]								
Street2: Box 355640									
City: Seattle County / Parish: King									
State: WA: Washington	Province:								
Country: USA: UNITED STATES	ZIP / Postal Code: 98105-6698								
Phone Number: 206-685-2609 Fax Number:									
Email: jessup@uw.edu									
15. ESTIMATED PROJECT FUNDING 16. IS APPLIC 12372 PROCE	ATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER SS?								
	THIS PREAPPLICATION/APPLICATION WAS MADE								
La Tatal Nac Fadaral Fords	AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:								
DAT	TE:								
c. Total Federal & Non-Federal Funds 600,000.00 b. NO	PROGRAM IS NOT COVERED BY E.O. 12372; OR								
d. Estimated Program Income	PROGRAM HAS NOT BEEN SELECTED BY STATE FOR								
•	REVIEW								
17. By signing this application, I certify (1) to the statements contained in the list of certifications* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances * and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious. or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001) I agree *The list of certifications and assurances, or an Internet site where you may obtain this list, is contained in the announcement or agency specific instructions.									
	l in the announcement or agency specific instructions.								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation	on								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation									
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative	on								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add Add	on								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative	Delete Attachment View Attachment View Attachment								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol	Delete Attachment View Attachment Middle Name:								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes	Delete Attachment View Attachment Middle Name:								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director	Delete Attachment View Attachment Middle Name:								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington	Delete Attachment View Attachment Middle Name:								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington Department: Office of Sponsored Programs Division:	Delete Attachment View Attachment Middle Name:								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington Department: Office of Sponsored Programs Division: Street1: 4333 Brooklyn Ave NE	Delete Attachment View Attachment Middle Name:								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington Department: Office of Sponsored Programs Division: Street1: 4333 Brooklyn Ave NE Street2: Box 359472	Delete Attachment View Attachment Middle Name:								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington Department: Office of Sponsored Programs Division: Street1: 4333 Brooklyn Ave NE Street2: Box 359472 City: Seattle County / Parish: King	Attachment Delete Attachment View Attachment Middle Name: Suffix:								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington Department: Office of Sponsored Programs Division: Street1: 4333 Brooklyn Ave NE Street2: Box 359472 City: Seattle County / Parish: King State: WA: Washington Country: USA: UNITED STATES	Delete Attachment View Attachment View Attachment								
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*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington Department: Office of Sponsored Programs Division: Street1: 4333 Brooklyn Ave NE Street2: Box 359472 City: Seattle County / Parish: King State: WA: Washington Country: USA: UNITED STATES Phone Number: 206-543-4043 Fax Number: 206-685-1732	Delete Attachment View Attachment View Attachment								
*The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington Department: Office of Sponsored Programs Division: Street1: 4333 Brooklyn Ave NE Street2: Box 359472 City: Seattle County / Parish: King State: WA: Washington Country: USA: UNITED STATES Phone Number: 206-543-4043 Fax Number: 206-685-1732 Email: osp@uw.edu	Delete Attachment View Attachment View Attachment								
**The list of certifications and assurances, or an Internet site where you may obtain this list, is contained: 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation: 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington Department: Office of Sponsored Programs Division: Street1: 4333 Brooklyn Ave NE Street2: Box 359472 City: Seattle County / Parish: King State: Wa: Washington Country: USA: UNITED STATES Phone Number: 206-543-4043 Fax Number: 206-685-1732 Email: osp@uw.edu Signature of Authorized Representative Alison C Schultz	Delete Attachment Middle Name: Suffix: Province: ZIP / Postal Code: 98195-9472 Date Signed 10/05/2021								
**The list of certifications and assurances, or an Internet site where you may obtain this list, is contained 18. SFLLL (Disclosure of Lobbying Activities) or other Explanatory Documentation 1242-A172888_Rep-Tax-Deliquency.pdf Add 19. Authorized Representative Prefix: Ms. First Name: Carol Last Name: Rhodes Position/Title: Director Organization: University of Washington Department: Office of Sponsored Programs Division: Street1: 4333 Brooklyn Ave NE Street2: Box 359472 City: Seattle County / Parish: King State: WA: Washington Country: USA: UNITED STATES Phone Number: 206-543-4043 Fax Number: 206-685-1732 Email: osp@uw.edu Signature of Authorized Representative	Delete Attachment Middle Name: Suffix:								

Updated: February 21, 2018



DID-NOW: Developing an Inclusive and Diverse Naval Oceanographic Workforce Proposal Title A172888, 9/30/21 Proposal Number and/or Date Representation Regarding an Unpaid Delinquent Tax Liability or a Felony Conviction under Any Federal Law - DoD **Appropriations** is not ▼ a corporation that has any unpaid Federal tax liability that has been (1) The applicant represents that it is assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. is not a corporation that was convicted of a felony criminal violation under any (2) The applicant represents that it is Federal law within the preceding 24 months. NOTE: If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless a Federal agency suspension and debarment official (SDO) has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore should provide information about its tax liability or conviction to the agency's SDO as soon as it can do so, to

> OMB Control Number: 0704-0494 OMB Expiration Date: 11/30/2019

AGENCY DISCLOSURE NOTICE

facilitate completion of the required consideration before award decisions are made.

The public reporting burden for this collection of information is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewed the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Washington Headquarters Services, Executive Services Directorate, Directives Divisions, 4800 Mark Center Drive, East Tower, Suites 02G09, Alexandria, VA 22350-3100 [0704-0494]. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

OMB Number: 4040-0001 Expiration Date: 12/31/2022

RESEARCH & RELATED Senior/Key Person Profile (Expanded)

PROFILE - Project Director/Principal Investigator									
Prefix: Dr. * First Name: Andrew Middle Name: T.									
* Last Name: Jessup Suffix:									
Position/Title: Senior Principal Oceanographer Department: Applied Physics Laboratory									
Organization Name: University of Washington Division:									
* Street1: 1013 NE 40th Street									
Street2: Box 355640									
* City: Seattle County/ Parish: King									
* State: WA: Washington Province:									
* Country: USA: UNITED STATES									
* Phone Number: 206-685-2609 Fax Number:									
* E-Mail: jessup@uw.edu									
Credential, e.g., agency login:									
* Project Role: PD/PI Other Project Role Category:									
Degree Type:									
Degree Year:									
*Attach Biographical Sketch 1234-A172888_Jessup_cv.pdf Add Attachment Delete Attachment View Attachment									
Attach Current & Pending Support 1235-A172888_JessupC&P.pdf Add Attachment Delete Attachment View Attachment									
PROFILE - Senior/Key Person 1									
Prefix: Dr. * First Name: Roxanne Middle Name: J									
* Last Name: Carini Suffix:									
Position/Title: Senior Oceanographer Department: Applied Physics Laboratory									
Organization Name: University of Washington Division:									
* Street1: 1013 NE 40th Street									
Street2: Box 355640									
* City: Seattle County/ Parish: King									
* State: WA: Washington Province:									
* Country: USA: UNITED STATES									
* Phone Number: 206-685-8326 Fax Number:									
* E-Mail: rcarini@apl.uw.edu									
Credential, e.g., agency login:									
* Project Role: Co-PD/PI Other Project Role Category:									
Degree Type:									
Degree Year:									
Attach Biographical Sketch 1236-A172888 Carini biosketch Add Attachment Delete Attachment View Attachment									
Attach Current & Pending Support 1237-2172888 Carini CSB rdf									

RESEARCH & RELATED Senior/Key Person Profile (Expanded)

PROFILE - Senior/Key Person 2										
Prefix: Dr.	* First Name	Emilio				Middle Na	me:			
* Last Name: Mayorga Suffix:										
Position/Title: Senior Oceanographer Department: Applied Physics Laboratory										
Organization Name: University of Washington Division:										
* Street1: 1013 NE 40th Street										
Street2: Box 355640										
* City: Seattle County/ Parish: King										
* State: WA: Washington Province:										
* Country: USA: 1	UNITED STATES				*	* Zip / Posta	l Code: 9810	5-6698		
* Phone Number: 2	06-543-6431		Fax Number:							
* E-Mail: emiliom	guw.edu									
Credential, e.g., a	gency login:									
* Project Role:	o-PD/PI		Other Project	t Role (Category	<i>y</i> :				
Degree Type:										
Degree Year:										
Attach Biogra	ohical Sketch	1238-A172	2888_Mayorga_CV.	odf	Add Atta	achment	Delete Attac	hment	View Attachmen	t
Attach Curren	& Pending Support	1239-A172	2888_Mayorga_C&P.	pdf	Add Atta	achment	Delete Attac	hment	View Attachmen	t
			PROFILE - Senior/I	(ey Pers	son 3					
Prefix:	* First Name	Lowell				Middle Na	me:			
* Last Name: Jone	S					Su	ffix:			
_	ruitment & Employ		pment Manager	Depa	rtment: 2	Applied P	hysics Labo	ratory	7	
Organization Name	University of W	ashington					Division:			
* Street1: 1013 N	E 40th Street									
Street2: Box 35	5640							_		
* City: Seattl	е		County/ Parish	King						
* State: WA: WA	ashington				F	Province:				
* Country: USA: 1	UNITED STATES				*	* Zip / Posta	l Code: 9810	5-6698		
* Phone Number: 2	06-221-9071		Fax Number:							
* E-Mail: lojones	apl.uw.edu									
Credential, e.g., a	gency login:									
* Project Role:	ther (Specify)		Other Project	t Role 0	Category	/:Recruit	ment & Empl	loyee D	evelopment Ma	nag
Degree Type:										
Degree Year:				_	_			_		

1240-A172888_Jones Lowell_

Attach Biographical Sketch

Attach Current & Pending Support

Delete Attachment

Delete Attachment

View Attachment

View Attachment

_cv Add Attachment

Add Attachment

RESEARCH & RELATED Other Project Information

OMB Number: 4040-0001 Expiration Date: 12/31/2022

1. Are Human Subjects Involved?
1. Are numan Subjects involved? Yes No 1.a. If YES to Human Subjects
Is the Project Exempt from Federal regulations? Yes No
If yes, check appropriate exemption number.
If no, is the IRB review Pending? Yes No
IRB Approval Date:
Human Subject Assurance Number:
2. Are Vertebrate Animals Used? Yes No
2.a. If YES to Vertebrate Animals
Is the IACUC review Pending? Yes No
IACUC Approval Date:
Animal Welfare Assurance Number:
3. Is proprietary/privileged information included in the application?
4.a. Does this Project Have an Actual or Potential Impact - positive or negative - on the environment?
4.b. If yes, please explain:
4.c. If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (EIS) been performed?
4.d. If yes, please explain:
5. Is the research performance site designated, or eligible to be designated, as a historic place?
5.a. If yes, please explain:
6. Does this project involve activities outside of the United States or partnerships with international collaborators?
6.a. If yes, identify countries:
6.b. Optional Explanation:
7. Project Summary/Abstract 1243-See Form SF424 Project Abstract. Add Attachment Delete Attachment View Attachment
8. Project Narrative 1244-Technical Proposal_A172888_Jessu Add Attachment Delete Attachment View Attachment
9. Bibliography & References Cited
10. Facilities & Other Resources
11. Equipment Delete Attachment View Attachment
12 Other Attachments Add Attachments Delete Attachments View Attachments

OMB Number: 4040-0019 Expiration Date: 02/28/2022

Project Abstract Summary

This Project Abstract Summary form must be submitted or the application will be considered incomplete. Ensure the Project Abstract field succinctly describes the project in plain language that the public can understand and use without the full proposal. Use 4,000 characters or less. Do not include personally identifiable, sensitive or proprietary information. Refer to Agency instructions for any additional Project Abstract field requirements. If the application is funded, your project abstract information (as submitted) will be made available to public websites and/or databases including USAspending.gov.

Funding Opportunity Number	
N00014-21-S-F004	
CFDA(s)	
12.330	
Applicant Name	
University of Washington	

Descriptive Title of Applicant's Project

DID-NOW: Developing an Inclusive and Diverse Naval Oceanographic Workforce (White Paper Tracking Number: 21-000000850)

Project Abstract

This proposal addresses the need to engage STEM students in Navy-centric educational opportunities in order to develop pathways to the Department of the Navy's current and future workforce. The geosciences, and oceanography in particular, have significant underrepresentation of women and minorities with regard to recruitment, retention, and promotion in academic and research positions. Undergraduate internships can be especially effective in directing students to pursue new career paths because the participants tend to be eager to learn, open to new opportunities, and uncertain of their direction. APL-UW's extensive and wide-ranging research programs can provide stimulating and life-changing experiences that broaden education beyond the classroom and motivate students to pursue STEM careers with Navy relevance.

Our approach will be to establish the DID-NOW (Developing an Inclusive and Diverse Naval Oceanographic Workforce) program, a comprehensive summer undergraduate fellowship program that will provide (1) project-based research experience, (2) mentoring and support outside the research activity, (3) community building and support opportunities through peer-to-peer relationships, and (4) tools and strategies to navigate the pathways to a Navy-relevant career. This broad-based strategy is intended to go beyond the research experience itself by providing supplemental perspectives and resources to participants. Recruitment will target racial and ethnic minority students and military-connected students through community and Navy partnerships. Weekly meetings will include guest speakers in Navy-related jobs, tours of APL-UW laboratories and facilities, and career counselors familiar with DON STEM pathways. The program will include community-building activities to enable the intern cohort to strengthen peer to peer relationships. All interns will be given the opportunity to participate in a one-day training cruise on the UW research vessel R/V Rachel Carson in Puget Sound.

The educational foundation of the summer internship program will be our partnership with the University of Washington Undergraduate Research Program (URP), which is under the auspices of the Undergraduate Academic Affairs office. The heart of the internship will be the pursuit of an independent research project under the guidance of a member of the research staff. Interns will present the results of their research at a lab-wide colloquium that will be advertised and open to the UW community, Navy and outside partners, and local maritime industry.

The impact on DoD capabilities will be the establishment of a robust summer undergraduate program focused on enabling pathways to Navy-oriented careers. Our long-term goal is to establish a permanent position for an individual to coordinate laboratory-wide programs related to training and educating the future Naval STEM workforce. To that end, we will supplement the proposed budget with laboratory discretionary funds sufficient to support the program director for a period of up to two years. This period of internal support is intended to allow time to establish additional STEM funding from a variety of sponsors to ensure longevity of a broad-based, laboratory-wide STEM program.

RESEARCH & RELATED BUDGET - Budget Period 1

OMB Number: 4040-0001 Expiration Date: 12/31/2022

ORGANIZATIO	ONAL DUNS:	605799469	0000 E	nter name of Organ	ization:	Unive	rsity o	f Washin	gton			
Budget Type:	⊠ Project	Subawa	ard/Consortium			Budget	Period:	1 s	tart Date	04/15/2022	End Date: 04/14/2023	3
A. Senior/Key	y Person											
								Month	ıs	Requested	Fringe	Funds
Prefix	First	Middle	Last	Suffix	Base	e Salary (<u>)</u> C	al. Acad	I. Sum.	Salary (\$)	Benefits (\$)	Requested (\$)
Dr.	Andrew	T.	Jessup		(h)	1/1	0.40				\ / / \	12,477.00
Project Role	: PD/PI				(1)	'\-					1 (41)	
Dr.	Roxanne	J	Carini				1.00				$I \setminus I$	13,239.00
Project Role	: Co-Investi	gator										
Dr.	Emilio		Mayorga				1.00				_	15,331.00
Project Role	: Co-Investi	gator										
	Program		(TBD)				2.75				_	41,993.00
	Coordinator											
Project Role	Key Person	nel										
										Total Funda	requested for all Senior ┌	
Additional Senio	or Key Persons:	:		Add Atta	chment	Delete A	\ttachmer	View	Attachmer	Key Per	sons in the attached file	
											Total Senior/Key Person	83,040.00
B. Other Pers	sonnel											
Number of							Months			equested	Fringe	Funds
Personnel	Projec	t Role			_	Cal.	Acad.	Sum.	S	alary (\$)	Benefits (\$)	Requested (\$)
	Post Doctora	l Associates										
	Graduate Stu	ıdents										
	Undergradua	te Students										
	Secretarial/C	lerical			Ī							
	Total Number	Other Personr	nel								Total Other Personnel	
								Total S	Salary, V	Vages and Fri	inge Benefits (A+B)	83,040.00

C. Equipment Description		
List items and dollar amount for each item e	exceeding \$5,000	
Equipment item		Funds Requested (\$)
Additional Equipment:	Add Attachment Delete Attach	nment View Attachment
Total fo	unds requested for all equipment listed in the attached file	
	Total Equipment	
D. Travel		Funds Requested (\$)
1. Domestic Travel Costs (Incl. Canada, Mex	cico and U.S. Possessions)	
2. Foreign Travel Costs		
	Total Travel Cost	
E. Participant/Trainee Support Costs		Funds Requested (\$)
1. Tuition/Fees/Health Insurance		
2. Stipends		
3. Travel		
4. Subsistence		
5. Other		
Number of Participants/Trainees	Total Participant/Trainee Support Costs	

F. (Other Direct Costs				Funds Requested (\$)
1.	Materials and Supplies				1,919.00
2.	Publication Costs				
3.	Consultant Services				
4.	ADP/Computer Services				
5.	Subawards/Consortium/Contractual Costs				
6.	Equipment or Facility Rental/User Fees				
7.	Alterations and Renovations				
8.	APL Prorated Direct Costs (35.2% of M	rdc)			29,905.00
9.					
10.					
			Tota	I Other Direct Costs	31,824.00
G. [Direct Costs				Funds Requested (\$)
			Total Direct	Costs (A thru F)	114,864.00
<u>H. I</u>	Indirect Costs				
	Indirect Cost Type	Indirect (Cost Rate (%) Ind	lirect Cost Base (\$)	Funds Requested (\$)
]	MTDC	(b) ((b) (4)	(h) (1
			Tota	al Indirect Costs	(D) (4
	gnizant Federal Agency ency Name, POC Name, and				
	C Phone Number)	th and Human Se	rvices, Janet T	urner, (415) 437-7	820
<u>I. To</u>	otal Direct and Indirect Costs				Funds Requested (\$)
	Tota	al Direct and Inc	direct Institution	nal Costs (G + H)	136,688.00
<u>J. F</u>	Fee				Funds Requested (\$)
K. 1	Total Costs and Fee				Funds Requested (\$)
			Total Cos	ts and Fee (I + J)	136,688.00
L. E	Budget Justification				
(Only	nly attach one file.) 1241-Cost Proposal_A172	2888_Jessup_DON	Add Attachmen	Delete Attachme	ent View Attachment

RESEARCH & RELATED BUDGET - Budget Period 2

OMB Number: 4040-0001 Expiration Date: 12/31/2022

ORGANIZATIO	ONAL DUNS:	605799469	0000 E I	nter name of Orga	nization:	Unive	rsity of	E Washir	ngton			•
Budget Type:	⊠ Project	Subawa	ard/Consortium			Budget	Period:	2 S	tart Date	e: 04/15/2023	End Date: 04/14/2024	
A. Senior/Key	y Person											
Prefix	First	Middle	Last	Suffix	Base	e Salary (\$) C	Monti al. Acad		Requested Salary (\$)	Fringe Benefits (\$)	Funds Requested (\$)
Dr.	Andrew	т.	Jessup		/h	\	0.25					7,954.00
Project Role	: PD/PI				(D) (4) (4)	
Dr.	Roxanne	J	Carini				0.50					6,752.00
Project Role	: Co-Investi	gator						'				
Dr.	Emilio		Mayorga				0.50					7,820.00
Project Role	: Co-Investi	gator										
	Program		(TBD)				2.75					42,832.00
Project Role	Coordinator											
,	Key Person	neı										
Additional Senio	or Key Persons:			Add Att	tachment	Delete A	Attachmen	View	Attachme		requested for all Senior sons in the attached file	
										1	Total Senior/Key Person	65,358.00
B. Other Pers	sonnel											
Number of							Months		F	Requested	Fringe	Funds
Personnel	Projec	t Role			г	Cal.	Acad.	Sum.		Salary (\$)	Benefits (\$)	Requested (\$)
	Post Doctora	l Associates			Į							
	Graduate Stu	ıdents										
	Undergradua	te Students										
	Secretarial/C	lerical										
	Total Number	Other Personr	nel								Total Other Personnel	
								Total \$	Salary,	Wages and Fri	nge Benefits (A+B)	65,358.00

C. Equipment Description List items and dollar amount for each item exceeding \$5,000 Funds Requested (\$) **Equipment item** Delete Attachment Additional Equipment: **Add Attachment** View Attachment Total funds requested for all equipment listed in the attached file **Total Equipment** D. Travel Funds Requested (\$) Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions) 1,723.00 Foreign Travel Costs 1,723.00 **Total Travel Cost** E. Participant/Trainee Support Costs Funds Requested (\$) Tuition/Fees/Health Insurance 7,275.00 Stipends 90,000.00 Travel Subsistence 39,060.00 Other

Total Participant/Trainee Support Costs

Number of Participants/Trainees

15

136,335.00

F.	Other Direct Costs	Funds Requested (\$)
1.	Materials and Supplies	3,000.00
2.	Publication Costs	
3.	Consultant Services	
4.	ADP/Computer Services	
5.	Subawards/Consortium/Contractual Costs	
6.	Equipment or Facility Rental/User Fees	
7.	Alterations and Renovations	
8.	APL Prorated Direct Costs (35.2% of MTDC)	24,669.00
9.		
10.		
	Total Other Direct Costs	27,669.00
G. [Direct Costs	Funds Requested (\$)
	Total Direct Costs (A thru F)	231,085.00
<u>H. I</u>	ndirect Costs	
	Indirect Cost Type Indirect Cost Rate (%) Indirect Cost Base (\$)	Funds Requested (\$)
	MTDC (b) (4)	(h) (1
	Total Indirect Costs	(D) (T
	prizant Federal Agency ency Name, POC Name, and	
	Phone Number) Department of Health and Human Services, Janet Turner, (415) 437-75	820
<u>I. T</u>	otal Direct and Indirect Costs	Funds Requested (\$)
	Total Direct and Indirect Institutional Costs (G + H)	249,088.00
<u>J. F</u>	ee	Funds Requested (\$)
K . 1	Total Costs and Fee	Funds Requested (\$)
	Total Costs and Fee (I + J)	249,088.00
L. E	Budget Justification	
(Only	y attach one file.) 1241-Cost Proposal_A172888_Jessup_DON Add Attachment Delete Attachmen	ent View Attachment

RESEARCH & RELATED BUDGET - Budget Period 3

OMB Number: 4040-0001 Expiration Date: 12/31/2022

ODGANIZATI	ONAL BUNG.											
ORGANIZATI	ONAL DUNS:	6057994690	0000	nter name of Or	ganization:	Univ	ersity o	f Wash:	ington			
Budget Type:		Subawa	ard/Consortium			Budge	t Period:	3	Start Date	04/15/2024	End Date: 04/14/202	5
A. Senior/Ke	y Person											
Prefix	First	Middle	Last	Suffix	Ras	e Salary	(\$) C	Mon	iths ad. Sum.	Requested Salary (\$)		Funds Requested (\$)
Dr.	Andrew	T.	Jessup		Dus	(b) (4)	2.75				Zeneme (v)	43,689.00
	Key Person									(b) (4)		20,000
				Add	Attachment	Delete	Attachme	nt Vie	w Attachme		s requested for all Senior	
Additional Senio	or Key Persons:			Add	Audenment	Delete	Attachine	IL VIC	WAttachine	Key Pe	ersons in the attached file	
											Total Senior/Key Person	43,689.00
3. Other Pers	sonnel											
Number of Personnel	Projec	t Role				Cal.	Months Acad.	Sum.		Requested Salary (\$)	Fringe Benefits (\$)	Funds Requested (\$)
	Post Doctora	l Associates										
	Graduate Stu	dents							ī			
	Undergradua	te Students										
	Secretarial/C								i			
									1			
	Total Number	Other Personn	el								Total Other Personnel	
								Total	Salary, \	Wages and F	ringe Benefits (A+B)	43,689.00
C. Equipme	nt Descriptio	n										
		nt for each ite	m exceeding \$	55,000								
Equipment	item							Fu	nds Reque	sted (\$)		
Additional Equ	ipment:			A	dd Attachmer	nt	Delete Atta	chment	View A	ttachment		
		То	tal funds reques	sted for all equipm	nent listed in	the attac	hed file					
						Total Eq	uipment					

D. Travel		Funds Requested (\$)
1. Domestic Travel Costs (Incl. Canada, Mexico a	nd U.S. Possessions)	1,723.00
2. Foreign Travel Costs		
	Total Travel Cost	1,723.00
E. Participant/Trainee Support Costs		Funds Requested (\$)
1. Tuition/Fees/Health Insurance		7,275.00
2. Stipends		90,000.00
3. Travel		
4. Subsistence		39,060.00
5. Other		
15 Number of Participants/Trainees	Total Participant/Trainee Support Costs	136,335.00

F.	Other Direct Costs	Funds Requested (\$)
1.	Materials and Supplies	3,000.00
2.	Publication Costs	
3.	Consultant Services	
4.	ADP/Computer Services	
5.	Subawards/Consortium/Contractual Costs	
6.	Equipment or Facility Rental/User Fees	
7.	Alterations and Renovations	
8.	APL Prorated Direct Costs (35.2% of MTDC)	17,041.00
9.		
10.		
	Total Other Direct Costs	20,041.00
G. I	Direct Costs	Funds Requested (\$)
	Total Direct Costs (A thru F)	201,788.00
<u>H. I</u>	ndirect Costs	
	Indirect Cost Type Indirect Cost Rate (%) Indirect Cost Base (\$)	Funds Requested (\$)
	MTDC (b) (4) (b) (4)	(h) (1
	Total Indirect Costs	(D) (4
	prizant Federal Agency ency Name, POC Name, and	
	Phone Number) Department of Health and Human Services, Janet Turner, (415) 437-78	320
<u>I. T</u>	otal Direct and Indirect Costs	Funds Requested (\$)
	Total Direct and Indirect Institutional Costs (G + H)	214,224.00
<u>J. F</u>	ee	Funds Requested (\$)
K . '	Total Costs and Fee	Funds Requested (\$)
	Total Costs and Fee (I + J)	214,224.00
L. E	Budget Justification	
(Onl	y attach one file.) 1241-Cost Proposal_A172888_Jessup_DON Add Attachment Delete Attachment	nt View Attachment

RESEARCH & RELATED BUDGET - Cumulative Budget

	als (\$)		
Section A, Senior/Key Person		192,087.00	
Section B, Other Personnel			
Total Number Other Personnel			
Total Salary, Wages and Fringe Benefits (A+B)		192,087.00	
Section C, Equipment			
Section D, Travel		3,446.00	
1. Domestic	3,446.00		
2. Foreign			
Section E, Participant/Trainee Support Costs		272,670.00	
1. Tuition/Fees/Health Insurance	14,550.00		
2. Stipends	180,000.00		
3. Travel			
4. Subsistence	78,120.00		
5. Other			
6. Number of Participants/Trainees	30		
Section F, Other Direct Costs		79,534.00	
1. Materials and Supplies	7,919.00		
2. Publication Costs			
3. Consultant Services			
4. ADP/Computer Services			
5. Subawards/Consortium/Contractual Costs			
6. Equipment or Facility Rental/User Fees			
7. Alterations and Renovations			
8. Other 1	71,615.00		
9. Other 2			
10. Other 3			
Section G, Direct Costs (A thru F)		547,737.00	
Section H, Indirect Costs		(b) (4)	
Section I, Total Direct and Indirect Costs (G + H)		600,000.00	
Section J, Fee			
Section K, Total Costs and Fee (I + J)		600,000.00	

COST PROPOSAL

FOA NUMBER: N00014-21-S-F004

PROPOSAL TITLE: DID-NOW: Developing an Inclusive and Diverse Naval

Oceanographic Workforce

PRIME APPLICANT: Applied Physics Laboratory

University of Washington

1013 NE 40th Street, Box 355640

Seattle, WA 98105-6698

TECHNICAL CONTACT: Dr. Andrew Jessup, Senior Principal Oceanographer

Applied Physics Laboratory University of Washington

1013 NE 40th Street, Box 355640

Seattle, WA 98105-6698

Phone: (206) 685-2609 Fax: (206) 543-6785

Email: jessup@apl.washington.edu

AUTHORIZED REPRESENTATIVE: Ms. Carol Rhodes, Director

Office of Sponsored Programs University of Washington

4333 Brooklyn Ave NE, Box 359472

Seattle, WA 98195-9472

Phone: (206) 543-4043 Fax: (206) 685-1732

Email: osp@uw.edu

PERIOD OF PERFORMANCE: 15 April 2022 – 14 April 2025

TOTAL FUNDS REQUESTED: \$600,000

Please reference proposal number A172888 on all correspondence concerning this proposal.

Budget Justification

A. Senior/Key Personnel

All wages and salaries are paid in accordance with University of Washington ("UW") policy, are budgeted at each employee's current rate, and escalated each out year to account for increases (e.g., merit, COLA).

Principal Investigator, Andrew Jessup (Y1: 0.4 months; Y2: 0.25 months), will be responsible for the overall management of the project and budget.

Co-Investigators Roxanne Carini (Y1: 1.0 month; Y2: 0.5 months) and Emilio Mayorga (Y1: 1.0 month; Y2: 0.5 months) will co-chair the search committee for the program coordinator. They will be responsible for establishing the committee, writing the job description, conducting interviews, and providing the committee's recommendation to the Executive Director.

Funds are requested to hire and support a Program Coordinator (Y1 - Y3: 2.75 months per year) to develop and run the summer student internship program.

B. Other Personnel

None.

C. Fringe Benefits

The benefit and leave rates included in the budget are in accordance with University of Washington's negotiated rates approved by the Department of Health and Human Services (DHHS) and UW policy on proposal budgets. APL-UW's negotiated benefit rates for Professional Staff is (b) (4) and the leave rates is (b) (4) The UW's fringe benefit rates tables are located at: https://www.washington.edu/research/institutional-facts-and-rates/#employee-benefits

D. Equipment (over \$5,000)

None.

E. Travel: Domestic Travel

Travel costs are budgeted in accordance with University and State of Washington regulations and include contract airfare (when available), current per diem rates, travel agent fee, and airport security fees. The costs proposed represent the best estimate of the off-site trips (e.g., kick off meeting, program reviews, conferences, fieldwork) required to successfully complete this project.

Round trip airfare rates are taken from the Washington State contract with Alaska Airlines where city pairs exist.

Per Diem rates are set by the State of Washington. Full Per Diem days are assumed and therefore not prorated.

Other travel costs include items such as ground transportation (to/from airports, at destination), airline & Homeland Security fees, tolls, parking, gas, mileage, and other allowable travel costs not otherwise specified.

Funds are requested for the program coordinator to attend two Project Peer Review Meetings in Years 2 & 3.

The details for each trip are listed below:

Year 2	Trips:	Staff:	Days/Trip:
Project Review Meeting, Washington D.C.	1	1	3
RT Airfare: Sea - WDC	1	\$820	\$820
Per Diem - Lodging	2	\$258	\$516
Per Diem - M&IE	3	\$79	\$237
Other (ground trans, pkg, fees, tolls)	1	\$150	\$150
Subtotal			\$1,723
Year 3	Trips:	Staff:	Days/Trip:
Project Review Meeting, Washington D.C.	1	1	3
RT Airfare: Sea - WDC	1	\$820	\$820
Per Diem - Lodging	2	\$258	\$516
Per Diem - M&IE	3	\$79	\$237
Other (ground trans, pkg, fees, tolls)	1	\$150	\$150
Subtotal			\$1,723

F. Participant/Trainee Support Costs

Funds in the amount of \$272,670 are requested for Years 2 and 3 to support 15 undergraduate researchers each summer in the Undergraduate Research Program (URP) at UW. The costs per student include tuition for the URP summer research seminar course (\$235), program fee (\$250) for program activities such as poster session, workshops, orientation, presentation, and end of summer celebration, stipend (\$6,000), and subsistence for non-UW student housing (\$2,604 for summer quarter; \$42 per night). The summer undergraduate researchers will work on an individual research project under the supervision of a APL-UW researcher. The students will participate in weekly activities organized by URP and APL-UW. Their requirements include a mid-summer progress report and an end of summer report and public presentation. The students will also provide feedback on the program as part of the evaluation metrics.

G. Other Direct Costs

- 1. Materials and Supplies. Funds are requested for:
 - A laptop for the Program Coordinator \$1,600 in Year 1
 - Software and presentation supplies for the Program Coordinator \$319 in Year 1.
 - Research project supplies for interns \$6,000 total in Years 2 & 3 (budgeted for 15 interns per year; \$200 per person).

- These costs are estimated based on experience performing similar work on other projects, vendor price list, or quotes.
- 8. APL Prorated Direct Costs (PDC). Funds in the amount of \$71,615 are requested for all three years. APL-UW's primary purpose is research and development and as such, it is solely funded through grant and contract revenue. APL-UW's operating expenses meet the definition of Direct Costs as defined by 2 CFR Part §200.413, and therefore are directly charged to awards through the application of the PDC rate (b) (4). Given that PDC is a Direct Cost, it is included within the MTDC cost base for F&A recovery. Per the attached letter, APL-UW's Prorated Direct Costs have been reviewed and approved by the Navy's Resident Administrative Contracting Officer at the Office of Naval Research Seattle Regional Office on September 12, 2018.

Summary Table of Other Costs:

Description	Year 1	Year 2	Year 3
1. Materials and Supplies			
Laptop for the Program Coordinator	\$1,600		
Software and presentation supplies	\$319		
Research project supplies for interns		\$3,000	\$3,000
Materials and Supplies total	\$1,919	\$3,000	\$3,000
8. APL Prorated Direct Costs (PDC)	\$29,905	\$24,669	\$17,041
TOTAL	\$31,824	\$27,669	\$20,041

All costs are based on recent purchases, quotes, or established rates.

H. Indirect costs

APL-UW's current F&A rate is (b) (4) of Modified Direct Cost based on the DHHR Rate agreement dated September 30, 2020.

APL- UW Estimated Budget

TITLE: DID-NOW: Developing an Inclusive and Diverse Naval Oceanographic Workforce PI: Andrew Jessup Budget Summary

	YR 1	YR 2	YR 3	TOTAL
1	/1- > /			
A. Salaries ¹	(b) (4	4)		\$125,794
B. Employee Benefits ²	(b) (1			\$66, 2 93
B. Employee Belletits	(b) (4			\$00,273
C. Equipment	\$0	\$0	\$0	\$0
D. Travel ³	\$0	\$1,723	\$1,723	\$3,446
E. Participant Support Costs	\$0	\$136,335	\$136,335	\$272,670
F. Other Direct Costs				
Subcontracts	\$0	\$0	<i>\$0</i>	\$0
Services	\$0	\$0	<i>\$0</i>	\$0
Supplies	\$1,919	\$3,000	\$3,000	\$7,919
Graduate Operating Fees	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Subtotal Other Direct Costs	\$1,919	\$3,000	\$3,000	\$7,919
G. Prorated Direct Costs ⁴	\$29,905	\$24,669	\$17,041	\$71,615
H. Total Direct Costs	\$114,864	\$231,085	\$201,788	\$547,737
I. Indirect/F&A Costs 5	(b) (4)			
I Total Dinest Indinest Costs		\$240,000	#214224	\$600,000
J. Total Direct + Indirect Costs	\$136,688	\$249,088	\$214,224	\$600,000
K. TOTAL	\$136,688	\$249,088	\$214,224	\$600,000

NOTES

¹ Estimated Staff hours are calculated by multiplying total MM by the hours per month (173.3).

 $^{^{2}\,}$ APL benefit and leave rates are recovered in accordance with UW policy and DHHS negotiated rates.

³ Per diem rates are set by the State of Washington.

⁴ ONR Prorated Direct Cost Rate Email Communication dated 8 October 2019. PDC is a Direct Cost.

⁵ DHHS Rate Agreement dated 30 September 2020. F&A is an Indirect Cost.

PI: Andrew Jessup

15 April 2022 - 14 April 2023

	<u>Amount</u>	Rate Subtotals	Year 1
A. Salaries	PM	(1)	Totals
Andrew Jessup, Principal Investigator	0.40	\$8,171	
Roxanne Carini, Co-Investigator	1.00	\$8,670	
Emilio Mayorga, Co-Investigator	1.00	\$10,040	
Program Coordinator (TBD)	2.75	\$27,500	
Subtotal PM/Salaries	5.15	\$54,381	
Estimated Staff Hours ¹	892		
Sea & Polar Region Compensation			
Subtotal Sea Pay		\$0	
Total Salaries			\$54,381
B. Employee Benefits ²			
Professional	54,381	(b) (4) \$15,281	
Subtotal Benefits	J 1 ,361	\$15,281	
Subtotal Beliefits		\$15,201	
<u>Leave Allowance</u>			
Professional	54,381	(b) (4) \$13,378	
Subtotal Leave Allowance		\$13,378	
Total Benefits/Leave Allowance			\$28,659
C. Equipment (\$5K and greater) Total Equipment			\$0
D. Travel	Trips: Staff:	Days/Trip:	
Total Travel	Tilps. Stair.	Days/111p.	\$0
Total Havel			Φ0
E. Participant Support Costs			
Total Participant Support Costs			\$0
F. Other Direct Costs			
Services-Subawards			
Subtotal - Subcontracts		\$0	
Services-Other		Ψ.	
Subtotal - Services		\$0	
Supplies		7.	
Laptop for Program Coordinator		\$1,600	
Software and presentation supplies		\$319	
Subtotal - Supplies		\$1,919	
<u>Other</u>			
Subtotal Grad Op Fees.		\$0	
Total Other Direct Costs			\$1,919

APL-UW Estimated Budget

TITLE: DID-NOW: Developing an Inclusive and Diverse Naval Oceanographic Workforce

PI: Andrew Jessup

15 April 2022 - 14 April 2023

	Amount MTDC Base	<u>Rate</u> Rate	Subtotals	Year 1
G. Prorated Direct Costs ⁴	\$84,959	(b) (4)		\$29,905
H. Total Direct Costs				\$114,864
	MTDC Base	Rate		
I. Facilities & Administration Costs ⁵	(b) (4)	(b) (4)		(b) (4)
J. Total Direct + Indirect/F&A				\$136,688
K. TOTAL				\$136,688

NOTES

 $^{^{\}rm 1}\,$ Estimated Staff hours are calculated by multiplying total MM by the hours per month (173 3)

 $^{^{2}\,}$ APL benefit and leave rates are recovered in accordance with UW policy and DHHS negotiated rates

³ Per diem rates are set by the State of Washington

 $^{^4\,}$ ONR Prorated Direct Cost Rate Email Communication dated 8 October 2019 $\,$ PDC is a Direct Cost

⁵ DHHS Rate Agreement dated 30 September 2020 F&A is an Indirect Cost

PI: Andrew Jessup

15 April 2023 - 14 April 2024

A. Salaries	<u>Amount</u> PM	Rate	Subtotals	<u>Year 2</u> Totals
Andrew Jessup, Principal Investigator	0.25	(h) (1)	\$5,209	Totals
Roxanne Carini, Co-Investigator	0.50	(D) (4)	\$4,422	
Emilio Mayorga, Co-Investigator	0.50		\$5,121	
Program Coordinator (TBD)	2.75		\$28,050	
Subtotal PM/Salaries	4.00		\$42,802	
Estimated Staff Hours ¹			Ψ-12,002	
	693			
Sea & Polar Region Compensation			60	
Subtotal Sea Pay			\$0	¢42.002
Total Salaries				\$42,802
B. Employee Benefits ²				
Professional	42,802	(b) (4)	\$12,027	
Subtotal Benefits	·		\$12,027	
Leave Allowance				
Professional	42,802	(b) (4)	\$10,529	
Subtotal Leave Allowance			\$10,529	
Total Benefits/Leave Allowance				\$22,556
C. Equipment (\$5K and greater) Total Equipment				60
				\$0
D. Travel	Trips:	Staff: I	Days/Trip:	<u> 50</u>
D. Travel Project Review Meeting, Washington D.C.	Trips:	1	3	
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC		\$820	\$820	50
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging	1	\$820 \$258	\$820 \$516	20
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE	1 1	\$820 \$258 \$79	\$820	50
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls)	1 1 2	\$820 \$258	\$820 \$516 \$237 \$150	50
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal	1 1 2 3	\$820 \$258 \$79	\$820 \$516 \$237	
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls)	1 1 2 3	\$820 \$258 \$79	\$820 \$516 \$237 \$150	\$1,723
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel	1 1 2 3	\$820 \$258 \$79	\$820 \$516 \$237 \$150	
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs	1 1 2 3 1	\$820 \$258 \$79 \$150	\$820 \$516 \$237 \$150 \$1,723	
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs 1. Tuition / Fees / Health Insurance	1 1 2 3	\$820 \$258 \$79 \$150	\$820 \$516 \$237 \$150 \$1,723	
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs	1 2 3 1	\$820 \$258 \$79 \$150	\$820 \$516 \$237 \$150 \$1,723	
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs 1. Tuition / Fees / Health Insurance 2. Stipends	1 1 2 3 1	\$820 \$258 \$79 \$150 \$485 \$6,000	\$820 \$516 \$237 \$150 \$1,723 \$7,275 \$90,000	
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs 1. Tuition / Fees / Health Insurance 2. Stipends 3. Travel	1 2 3 1	\$820 \$258 \$79 \$150	\$820 \$516 \$237 \$150 \$1,723	
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs 1. Tuition / Fees / Health Insurance 2. Stipends 3. Travel 4. Subsistence 5. Other	1 1 2 3 1	\$820 \$258 \$79 \$150 \$485 \$6,000	\$820 \$516 \$237 \$150 \$1,723 \$7,275 \$90,000	\$1,723
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs 1. Tuition / Fees / Health Insurance 2. Stipends 3. Travel 4. Subsistence	1 1 2 3 1	\$820 \$258 \$79 \$150 \$485 \$6,000	\$820 \$516 \$237 \$150 \$1,723 \$7,275 \$90,000	
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs 1. Tuition / Fees / Health Insurance 2. Stipends 3. Travel 4. Subsistence 5. Other Total Participant Support Costs F. Other Direct Costs	1 1 2 3 1	\$820 \$258 \$79 \$150 \$485 \$6,000	\$820 \$516 \$237 \$150 \$1,723 \$7,275 \$90,000	\$1,723
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs 1. Tuition / Fees / Health Insurance 2. Stipends 3. Travel 4. Subsistence 5. Other Total Participant Support Costs F. Other Direct Costs Services-Subawards	1 1 2 3 1	\$820 \$258 \$79 \$150 \$485 \$6,000	\$820 \$516 \$237 \$150 \$1,723 \$7,275 \$90,000 \$39,060	\$1,723
D. Travel Project Review Meeting, Washington D.C. RT Airfare: Sea - WDC Per Diem - Lodging Per Diem - M&IE Other (ground trans, pkg, fees, tolls) Subtotal Total Travel E. Participant Support Costs 1. Tuition / Fees / Health Insurance 2. Stipends 3. Travel 4. Subsistence 5. Other Total Participant Support Costs F. Other Direct Costs	1 1 2 3 1	\$820 \$258 \$79 \$150 \$485 \$6,000	\$820 \$516 \$237 \$150 \$1,723 \$7,275 \$90,000	\$1,723

PI: Andrew Jessup

15 April 2023 - 14 April 2024

	<u>Amount</u>	Rate	Subtotals	Year 2
Subtotal - Services			\$0	
<u>Supplies</u>				
Research project supplies for interns	15	\$200	\$3,000	
Subtotal - Supplies			\$3,000	
<u>Other</u>				
Subtotal Grad Op Fees.			\$0	
Total Other Direct Costs				\$3,000
	MTDC Base	Rate		
G. Prorated Direct Costs ⁴	\$70,081	(b) (4)		\$24,669
H. Total Direct Costs				\$231,085
	MTDC Base	Rate		
I. Facilities & Administration Costs ⁵	(b) (4)	(b) (4)		(b) (4)
J. Total Direct + Indirect/F&A				\$249,088
V TOTAL				6240.000
K. TOTAL				\$249,088

NOTES

¹ Estimated Staff hours are calculated by multiplying total MM by the hours per month (173 3)

 $^{^{2}\,}$ APL benefit and leave rates are recovered in accordance with UW policy and DHHS negotiated rates

³ Per diem rates are set by the State of Washington

 $^{^4\,}$ ONR Prorated Direct Cost Rate Email Communication dated 8 October 2019 $\,$ PDC is a Direct Cost

⁵ DHHS Rate Agreement dated 30 September 2020 F&A is an Indirect Cost

PI: Andrew Jessup

15 April 2024 - 14 April 2025

	Amount	Rate	Subtotals	Year 3
A. Salaries	PM	(b) (4)	000 (11	Totals
Program Coordinator (TBD)	2.75	(b) (4)	\$28,611	
Subtotal PM/Salaries	2.75		\$28,611	
Estimated Staff Hours ¹	477			
Sea & Polar Region Compensation				
Subtotal Sea Pay			\$0	
Total Salaries				\$28,611
2				
B. Employee Benefits ²		(1-) (4)		
Professional	28,611	(b) (4)	\$8,040	
Subtotal Benefits			\$8,040	
<u>Leave Allowance</u>		(b) (4)		
Professional	28,611	(D) (4)	\$7,038	
Subtotal Leave Allowance			\$7,038	
Total Benefits/Leave Allowance				\$15,078
C. Equipment (\$5K and greater)				0.0
Total Equipment				\$0
D. Travel	Tringe	Stoff.	Dova/Trin.	
Project Review Meeting, Washington D.C.			Days/Trip:	
RT Airfare: Sea - WDC	1 1	\$820	\$820	
Per Diem - Lodging	2	\$258	\$516	
Per Diem - M&IE			\$237	
	3	\$79 \$150		
Other (ground trans, pkg, fees, tolls) Subtotal	1	\$150	\$150 \$1,723	
Total Travel			\$1,723	\$1,723
Total Travel				\$1,725
E. Participant Support Costs				
1. Tuition / Fees / Health Insurance	15	\$485	\$7,275	
2. Stipends		\$6,000	\$90,000	
3. Travel	13	φυ,υυυ	\$70,000	
4. Subsistence			#20.060	
	1.5	\$2.604	X 4 4 11611	
	15	\$2,604	\$39,060	
5. Other Total Participant Support Costs	15	\$2,604	\$39,060	\$136,335

F. Other Direct Costs

PI: Andrew Jessup

15 April 2024 - 14 April 2025

	<u>Amount</u>	Rate	Subtotals	Year 3
Services-Subawards				
Subtotal - Subcontracts			\$0	
Services-Other				
Subtotal - Services			\$0	
<u>Supplies</u>				
Research project supplies for interns	15	\$200	\$3,000	
Subtotal - Supplies			\$3,000	
<u>Other</u>				
Subtotal Grad Op Fees.			\$0	
Total Other Direct Costs				\$3,000
	MTDC Base	Rate		
G. Prorated Direct Costs ⁴	\$48,412	(b) (4)		\$17,041
H. Total Direct Costs				\$201,788
	MTDC Base	Rate		
I. Facilities & Administration Costs ⁵	(b) (4)	(b) (4)		(b) (4)
J. Total Direct + Indirect/F&A				\$214,224
K. TOTAL				\$214,224

NOTES

¹ Estimated Staff hours are calculated by multiplying total MM by the hours per month (173.3).

² APL benefit and leave rates are recovered in accordance with UW policy and DHHS negotiated rates.

³ Per diem rates are set by the State of Washington.

⁴ ONR Prorated Direct Cost Rate Email Communication dated 8 October 2019. PDC is a Direct Cost.

⁵ DHHS Rate Agreement dated 30 September 2020. F&A is an Indirect Cost.

Institutional Facts and Rates

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Facilities and Administration (F&A)

F&A Rate Table

Official Contacts and Mailing Addresses

Single Audit Report

Annual Report

Review the <u>Annual Report</u> from Financial Management

Codes and Numbers

Description	Number / Code
Animal Welfare Assurance #	D16-00292 or A3464-01 (either may be used) More animal welfare regulatory codes and numbers
CAGE Code	1HEX5
Compliance Report Date (Approved by OFCCP)	3/2/2000
Congressional District	WA-007
DUNS Number	605799469
Employee Identification Number (EIN)	91-6001537 (1916001537A1)
DUNS Number – DoEd only	042803536
European Commission Participant Identification Code (PIC #)	998096536
F&A Rate Agreement Date	September 30, 2020
FICE Code	3798
Federal Demonstration Partnership (FDP) Expanded Clearinghouse	UW FDP Profile Information

Human Subjects Assurance FWA	FWA00006878 <u>View FWA and Expiration Date</u> Search by IORG#0000143, click on U of Washington.
IRB Registration Numbers	Registration numbers assigned by OHRP for each individual UW IRB: • A – IRB00000241 • B – IRB00000242 • D – IRB00000727 • J – IRB00005647
IRS / Entity Number	91-6001537 <u>UW IRS Tax Determination Letter</u>
IRS / W-9 Form	IRS W-9 Form
NAICS Code	611310
NRC Biohazards	WN-C001-1
Office of Naval Research (ONR) Contractor Purchasing System Review (CPSR) Approval	Approval valid through 8.31.2021 available from <u>ONR</u> <u>Correspondence</u>
UBI Number	178 019 988
Unique Entity Identifier (UEI)	HD1WMN6945W6
Unique Entity Identifier (UEI) – DoEd only	NFJ3CMQ4B418
Washington Statewide Vendor	SWV#0000210-03

More Codes, Numbers, and Certification Details are available in the <u>System for Award Management</u> (<u>SAM</u>). Use the UW DUNS Number in the search box.

Employee Fringe Benefit Rates

For each dollar paid as salary or wage to an employee, the UW incurs associated costs for fringe benefits. These benefits include F.I.C.A., worker's compensation, unemployment compensation, retirement, and health insurance.

These rates change and are updated on an annual basis. <u>GIM 3</u>: Fringe Benefit Rates and Sponsored Projects

Review the current **Benefit Rates** from UW Financial Reporting.

Campus Benefit Rates

Salary Titles	Object	Current	Preliminary
	Codes	Rates	Rates
Instruction and Research Faculty	01-10	(b) (4)	

Salary Titles	Object Codes	Current Rates	Preliminary Rates
Medical Residents	01-20	(b) (4)	
Residents and Chief Residents	01-20E	() ()	
Graduate student appointments	01-30, 01-40		
Post-Doctoral Trainees	01-50		
Classified staff	01-60		
Professional staff	01-70		
Professional staff (retirement exempt)	01-70ER		
Professional staff (healthcare exempt)	01-70EH		
Professional staff (retirement and healthcare exempt)	01-70EB		
Hourly, Visiting Scientists, and O.T.	01-80		
Pre-doctoral Fellows and Trainees	01-90		

Applied Physics Laboratory (APL) Benefit Rates

Certain Applied Physics Laboratory (APL) rates include staff leave accruals and differ from campus rates.

	Object	Current F	lates		Prelimina	ry Rate	5
Salary Titles	Codes	Benefits	Leave	Total	Benefits	Leave	Total
Instruction and Research Faculty	01-10	(b)) (4)			
Medical Residents	01-20						
Residents and Chief Residents	01-20E						
Graduate student appointments	01-30, 01-40						
Post-Doctoral Trainees	01-50						
Classified staff	01-60						
Professional staff	01-70						
Professional staff (retirement exempt)	01-70ER						
Professional staff (healthcare exempt)	01-70EH						
Professional staff (retirement and healthcare exempt)	01-70EB						

	Object	Current Rates			Preliminary Rates		
Salary Titles	Codes	Benefits	Leave	Total	Benefits	Leave	Total
Hourly, Visiting Scientists, and O.T.	01-80	(b)		4			
Pre-doctoral Fellows and Trainees	01-90						



DEPARTMENT OF THE NAVY

OFFICE OF NAVAL RESEARCH SEATTLE REGIONAL OFFICE 300 FIFTH AVENUE, SUITE 710 SEATTLE, WA 98104

IN REPLY REFER TO

ONR 247 September 12, 2018

Dr. Lisa M. Zurk Director, Applied Physics Laboratory University of Washington 909 NE Boat Street Seattle, WA 98105

Reference: Applied Physics Laboratory Prorated Direct Cost Rate submitted August 21, 2018, for the period October 1, 2018 through September 30, 2019.

Dear Dr. Zurk:

Based on my preliminary review, the below Applied Physics Laboratory (APL) Prorated Direct Cost (PDC) rate is provisionally approved for pricing and billing purposes, effective October 1, 2018.

Rate Category Prorated Direct Cost



<u>Application Base</u>

(a) APL Modified Total Direct Costs (MTDC) consisting of salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first \$25,000 of each subaward (regardless of the period of performance of the subawards). MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of \$25,000.

It should be noted that subsequent audits may result in necessary adjustments to the approved rate. The approved rate is subject to unilateral amendment by the government or bilateral amendment by the contracting parties at any time.

Please contact me if you have any questions or concerns at (206) 548-7243 or robert.rice@navy.mil.

Sincerely,

RICE.ROBERT.J. Digitally signed by RICE ROBERT J 1229596760 DN: cellS, on US Government, our-DoD, on-MRICE ROBERT J 1229596760 Date: 2018 09 12 14:16:11 0700

Robert J. Rice Administrative Contracting Officer

E-Copies to:

ONR 242/B. Synder ONR 25/E. Simonoff NAVSEA/J. Piunno DHHS/T. Lin UW/M. Kummer UW/D. Jones

COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 916001537

ORGANIZATION:

University of Washington Management Accounting and Analysis 4300 Roosevelt Way NE, Suite 300

Box 354966

Seattle, WA 98195-4966

DATE: 09/30/2020

FILING REF .: The preceding

agreement was dated

07/21/2017

The rates approved in this agreement are for use on grants, contracts and other agreements with the Federal Government, subject to the conditions in Section III.

SECTION I: INDIRECT COST RATES

RATE TYPES: FIXED FINAL PROV. (PROVISIONAL) PRED. (PREDETERMINED)

EFFECTIVE PERIOD

TYPE	FROM	TO	RATE(%) LOCATION	APPLICABLE TO
FINAL	07/01/2014	06/30/2015	(b) (4) ^{(1) & (A)}	Organized Research
PRED.	07/01/2015	06/30/2017	(1) & (A)	Organized Research
PRED.	07/01/2017	06/30/2018	(1) & (A)	Organized Research
PRED.	07/01/2018	06/30/2020	(1) & (A)	Organized Research
FINAL	07/01/2014	06/30/2015	(1) & (B)	Organized Research
PRED.	07/01/2015	06/30/2020	(1) & (B)	Organized Research
FINAL	07/01/2014	06/30/2015	(1) & (A)	Instruction
PRED.	07/01/2015	06/30/2020	(1) & (A)	Instruction
FINAL	07/01/2014	06/30/2015	(1) & (B)	Instruction
PRED.	07/01/2015	06/30/2020	(1) & (B)	Instruction
FINAL	07/01/2014	06/30/2015	(1) & (A)	Other Sponsored Activities
PRED.	07/01/2015	06/30/2016	(1) & (A)	Other Spon Act

ORGANIZATION: University of Washington Management Accounting and

Analysis

AGREEMENT DATE: 9/30/2020

TYPE	FROM	<u>TO</u>	<pre>RATE(%) LOCATION</pre>	APPLICABLE TO
PRED.	07/01/2016	06/30/2020	(b) (4) 1) & (A)	Other Sponsored Activities
FINAL	07/01/2014	06/30/2015	1) & (B)	Other Spon Act
PRED.	07/01/2015	06/30/2016	1) & (B)	Other Sponsored Activities
PRED.	07/01/2016	06/30/2020	1) & (B)	Other Spon Act
FINAL	07/01/2014	06/30/2015	1) & (C)	Core Grant
PRED.	07/01/2015	06/30/2016	1) & (C)	Core Grant
PRED.	07/01/2016	06/30/2020	1) & (C)	Core Grant
FINAL	07/01/2014	06/30/2015	1) & (C)	Non-Core Fed
PRED.	07/01/2015	06/30/2016	1) & (C)	Non-Core Fed
PRED.	07/01/2016	06/30/2020	1) & (C)	Non-Core Fed
FINAL	07/01/2014	06/30/2015	1) & (D)	
PRED.	07/01/2015	06/30/2016	1) & (D)	
PRED.	07/01/2016	06/30/2020	1) & (D)	
FINAL	07/01/2014	06/30/2015	2) & (E)	
PRED.	07/01/2015	06/30/2020	2) & (E)	
FINAL	07/01/2014	06/30/2015	1) & (F)	Organized Research
PRED.	07/01/2015	06/30/2016	1) & (F)	Organized Research
PRED.	07/01/2016	06/30/2017	1) & (F)	Organized Research
PRED.	07/01/2017	06/30/2019	1) & (F)	Organized Research
PRED.	07/01/2019	06/30/2020	1) & (F)	Organized Research
PROV.	07/01/2020	Until Amended	(G)	

*BASE

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(1) Modified total direct costs, consisting of all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel and up to the first \$25,000 of each subaward (regardless of the period of performance of the subawards under the award). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, and the portion of each subaward in excess of \$25,000.

- (2) Direct salaries and wages including vacation, holiday and sick pay and other paid absences but excluding other fringe benefits.
- (A) On-Campus
- (B) Off-Campus
- (C) Washington National Primate Research Center see Section II Special Remarks.
- (D) Applied Physics Laboratory
- (E) Vessel Operations
- (F) Lake Union Campus
- (G) Use same rates and conditions as those cited for fiscal year ending June 30, 2020.

Analysis

AGREEMENT DATE: 9/30/2020

SECTION I: FRINGE BENEFIT RATES**

TYPE	FROM	<u>TO</u>	RATE(%) LOCATION	APPLICABLE TO
FIXED	7/1/2018	6/30/2019	(b) (4) ^{(1) & (B)}	Faculty & Res. Assoc.
FIXED	7/1/2018	6/30/2019	(1) & (A)	Medical Residents & Senior Fellows
FIXED	7/1/2018	6/30/2019	(1) & (A)	Grad. Students
FIXED	7/1/2018	6/30/2019	(1) & (A)	Post Doc. Trainees
FIXED	7/1/2018	6/30/2019	(1) & (B)	Class. Staff
FIXED	7/1/2018	6/30/2019	(1) & (B)	Prof. Staff
FIXED	7/1/2018	6/30/2019	(1) & (B)	(D)
FIXED	7/1/2018	6/30/2019	(1) & (B)	(E)
FIXED	7/1/2018	6/30/2019	(1) & (B)	(F)
FIXED	7/1/2018	6/30/2019	(1) & (A)	Hourly
FIXED	7/1/2018	6/30/2019	(1) & (A)	Pre-Doctoral Trainees & Fellows
FIXED	7/1/2018	6/30/2019	(2) & (C)	Class. Staff
FIXED	7/1/2018	6/30/2019	(2) & (C)	Prof. Staff
FIXED	7/1/2018	6/30/2019	(2) & (C)	Faculty & Research Associates
FIXED	7/1/2019	6/30/2020	(1) & (B)	Faculty & Res. Assoc.
FIXED	7/1/2019	6/30/2020	(1) & (A)	Medical Residents & Senior Fellows
FIXED	7/1/2019	6/30/2020	(1) & (A)	Grad. Students
FIXED	7/1/2019	6/30/2020	(1) & (A)	Post Doc. Trainees
FIXED	7/1/2019	6/30/2020	(1) & (B)	Class. Staff
FIXED	7/1/2019	6/30/2020	(1) & (B)	Prof. Staff
FIXED	7/1/2019	6/30/2020	(1) & (B)	(D)
FIXED	7/1/2019	6/30/2020	(1) & (B)	(E)
FIXED	7/1/2019	6/30/2020	(1) & (B)	(F)

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FIXED	7/1/2019	6/30/2020	(b) (4) (1) & (A)	Hourly
FIXED	7/1/2019	6/30/2020	(1) (1) & (A)	Pre-Doctoral Trainees & Fellows
FIXED	7/1/2019	6/30/2020	(2) & (C)	Class. Staff
FIXED	7/1/2019	6/30/2020	(2) & (C)	Prof. Staff
FIXED	7/1/2019	6/30/2020	(2) & (C)	Faculty & Research Associates

** DESCRIPTION OF FRINGE BENEFITS RATE BASE:

- (1) Direct salaries and wages including vacation, holiday, and sick pay but excluding other fringe benefits.
- (2) Direct salaries and wages excluding vacation, sick leave, holidays, other paid absences and all other fringe benefits.
- (A) Entire University
- (B) All except Applied Physics Laboratory
- (C) Applied Physics Laboratory
- (D) Professional Staff Global (No Health)
- (E) Professional Staff Global (No Retirement)
- (F) Professional Staff Global (No Health or Retirement)

Analysis

AGREEMENT DATE: 9/30/2020

SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:

The fringe benefits are charged using the rate(s) listed in the Fringe Benefits Section of this Agreement. The following fringe benefits are included in the fringe benefit rate(s):

HEALTH INSURANCE, SOCIAL SECURITY & MEDICARE TAXES, WORKERS COMPENSATION, MEDICAL AID & INDUSTRIAL INSURANCE, UWRP, STATE RETIREMENT, UNEMPLOYMENT COMPENSATION, SEPARATION LEAVE PAYMENTS FOR CLASSIFIED & PROFESSIONAL STAFF, AND PAID FAMILY AND MEDICAL LEAVE.

TREATMENT OF PAID ABSENCES

Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are claimed on grants, contracts and other agreements as part of the normal cost for salaries and wages. Separate claims are not made for the cost of these paid absences. Beginning July 1, 2011, unused leave payments made upon separation of Classified and Professional Staff are included in the fringe benefit rates.

Beginning October 1, 1996 the Applied Physics Laboratory (APL) has separate fringe benefit rates from the remainder of the University of Washington. These rates include paid absences. Therefore, charges for direct salaries and wages from APL must exclude charges for paid absences, including vacation, sick leave, holidays, and other paid absences.

DEFINITION OF EQUIPMENT

Prior to 07/01/2016, equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds \$2,000. Effective 07/01/2016, equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds \$5,000.

DEFINITION OF ON-CAMPUS, OFF-CAMPUS AND SPECIAL RATES: DEFINITION OF OFF-CAMPUS RATE

- a. An off-campus program is one that is conducted (1) in leased facilities where space related costs (e.g. rent, utilities and maintenance) are charged directly to the program, or (2) in facilities made available (at no cost) to the program by a non-University organization, or (3) away from the University over an uninterrupted period of time in excess of 30 days for field work. The Off-Campus rate is not to be used as a substitute for the Vessel Operations rate or the Applied Physics Laboratory rate. Even though Pack Forest, Big Beef Creek, and Olympic Natural Resource Center are owned and operated by the University, these facilities are considered to be off campus.
- b. Projects conducted at two or more locations:

 There are instances where a project supported by a single grant or contract

Analysis

AGREEMENT DATE: 9/30/2020

is conducted at two or more locations, thus requiring special consideration in determining the appropriate indirect cost provision. The following should be observed in such circumstances:

- (1) Where the total annual amount of the grant or contract direct costs is less than \$250,000, a single indirect cost rate will be applied. This rate will be the one currently applicable to the location where the preponderance of project salaries is located.
- (2) Where the total annual amount of the grant or contract direct costs is \$250,000 or more, the appropriate rate for each location will be applied to the modified total direct costs specifically assigned to the respective location. In the absence of the institution's ability to specifically identify and assign costs to each location, the appropriate rate for each location will be applied to total project costs in the same ratio as direct salary costs incurred at each location during the period covered by the project billing or accounting.

PRIMATE CENTER RATES:

The Washington National Primate Research Center (WNPRC) has two Federally recognized rates for each time period. The NIH Office of the Director Primate Research Center (P51) Core Grant rate is (b) (4) for 07/01/14 - 06/30/16. The NIH Office of the Director Primate Research Center (P51) Core Grant rate is (b) (4) for 07/01/16 - 06/30/20. The Non-Core Federal Rate of (b) (4) for 07/01/14 - 06/30/16 is the sum of the Core Grant (b) (4) and the WNPRC specific F&A expenditures (b) (4)). The Non-Core Federal Rate of (b) (4) for 07/01/16 - 06/30/20 is the sum of the Core Grant (b) (4)) and the WNPRC specific F&A expenditures (b) (4)).

This rate agreement updates the fringe benefits only.

NEXT PROPOSAL DUE DATE

A fringe benefit rates proposal based on actual costs for fiscal year ending June 30, 2019 has been received and is under review.

Analysis

AGREEMENT DATE: 9/30/2020

SECTION III: GENERAL

A. LIMITATIONS:

The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the organization were included in its facilities and administrative cost principles as finally accepted: such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The same costs that have been treated as facilities and administrative costs are not claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the organization which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal

B. ACCOUNTING CHANGES:

This Agreement is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include, but are not limited to, changes in the charging of a particular type of cost from facilities and administrative to direct. Failure to obtain approval may result in cost disallowances.

C. FIXED RATES:

If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. USE BY OTHER FEDERAL AGENCIES:

The rates in this Agreement were approved in accordance with the authority in Title 2 of the Code of Federal Regulations, Part 200 (2 CFR 200), and should be applied to grants, contracts and other agreements covered by 2 CFR 200, subject to any limitations in A above. The organization may provide copies of the Agreement to other Federal Agencies to give them early notification of the Agreement.

E. OTHER:

If any Federal contract, grant or other agreement is reimbursing facilities and administrative costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected programs, and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of facilities and administrative costs allocable to these programs.

BY THE INSTITUTION:

University of Washington Management Accounting and Analysis

(b) (6)	. (19) 9(3)
(SIGNATURE)	100 miles (100 miles (
Brian McCart	911
(NAME)	
VP Finance	ENTERNAL MEETS NO YOUNG
(TITLE)	
9/30/20	
(DATE)	

ON BEHALF OF THE FEDERAL GOVERNMENT:

Arif M. Karim -	S Digitally signed by Arif M. Karim S S Date: 2020.09.30 15:27:21 -05'00'
(SIGNATURE)	
Arif Karim	
(NAME)	
Musakaw Cook 311	
Director, Cost Allocal	tion Services
	tion Services
	tion Services
(TITLE)	tion Services
(TITLE) 9/30/2020	tion Services
(TITLE) 9/30/2020	tion Services
(TITLE) 9/30/2020	tion Services
Director, Cost Allocal (TITLE) 9/30/2020 (DATE) 7194	tion Services
(TITLE) 9/30/2020	Janet Turner

(415) 437-7820

Telephone:

BIOGRAPHICAL SKETCH: Roxanne J Carini

(a) Professional Preparation

Institution	Location	Major/Area of Study	Degree	Year
Yale University	New Haven, CT	Applied Mathematics	BS	2011
University of Washington	Seattle, WA	Civil & Environmental Engineering	MSCE	2014
University of Washington	Seattle, WA	Civil & Environmental Engineering	PhD	2019
University of Washington	Seattle, WA	Ocean Physics Department, Applied Physics Laboratory	Postdoctoral Scholar	2021

(b) Appointments

From - To	Position Title, Organization and Location
09/2021 - Present	Senior Oceanographer, Northwest Association of Networked Ocean Observing Systems (NANOOS) at Applied Physics Laboratory, University of Washington, Seattle, WA
09/2020 - 09/2021	Research Associate, NANOOS at Applied Physics Laboratory, University of Washington, Seattle, WA
03/2020 - 09/2020	Independent Contractor - U.S. Marine Mammal Commission, Bethesda, MD
03/2019 - 03/2020	NOAA Sea Grant John A Knauss Marine Policy Fellow, U.S. Marine Mammal Commission, Bethesda, MD
07/2011 - 12/2018	Graduate Research Assistant, University of Washington, Applied Physics Laboratory, Seattle, WA

(c) Publications (Products most closely related to the proposed project)

Carini, R.J., C.C. Chickadel, A.T. Jessup (2021), Surf Zone Waves at the Onset of Breaking: 2. Predicting Breaking and Breaker Type, Journal of Geophysical Research: Oceans, 126, 4, https://doi.org/10.1029/2020IC016935.

Carini, R.J., C.C. Chickadel, A.T. Jessup (2021), Surf Zone Waves at the Onset of Breaking: 1. LIDAR and IR Data Fusion Methods, Journal of Geophysical Research: Oceans, 126, 4, https://doi.org/10.1029/2020JC016934.

Buscombe, D., R.J. Carini, S.R. Harrison, C.C. Chickadel, J.A. Warrick (2020), Optical Wave Gauging Using Deep Neural Networks, Coastal Engineering, 155, 103593, https://doi.org/10.1016/j.coastaleng.2019.103593.

Buscombe, D., and R.J. Carini (2019), A Data-Driven Approach to Classifying Wave Breaking in Infrared Imagery, Remote Sensing, 11, 859, https://doi.org/10.3390/rs11070859.

Carini, R.J., C.C. Chickadel, A.T. Jessup, and J. Thomson (2015), Estimating Wave Energy Dissipation in the Surf Zone Using Thermal Infrared Imagery, Journal of Geophysical Research: Oceans, 120, 3937-3957, https://doi.org/10.1002/2014|C010561

(d) Synergistic Activities

<u>Outreach and Education</u>: Partnered with the Technology Access Foundation (Seattle non-profit), to bring STEM opportunities to students from traditionally underserved and underrepresented communities. Co-led three seventh grade classes through a primer on Marine Heatwaves, a demonstration of the NANOOS Tuna Fishers and Climatology apps, and student-led inquiry of data to identify and discuss Marine Heatwaves in the region.

Mentorship: Coordinated and co-mentored a Louis Stokes Alliance for Minority Participation (LSAMP) undergraduate intern with NANOOS.

Science Community Service: Served as moderator and science judge for National Ocean Science Bowl 2019, 2020, and 2021.

Scientific Community Service: Review manuscripts for science journals

<u>Navy-related Experience</u>: Naval Research Enterprise Internship Program, Graduate Research Intern, Jun 2016 - Aug 2016, US Naval Research Laboratory, Stennis, MS

Emilio Mayorga

University of Washington, Applied Physics Laboratory

Seattle, WA 98105 Phone: (206) 543-6431, Email: emiliom@uw.edu

ORCID: 0000-0003-2574-4623 https://github.com/emiliom/

(a) Professional Preparation:

University of Washington Chemical Oceanography Ph.D., 2004
University of Washington Chemical Oceanography M.S., 1997
Massachusetts Institute of Technology Environmental Engineering Science B.S., 1992

(b) Appointments:

2009 – present Senior Oceanographer, U. of Washington, Applied Physics Lab., Seattle

2007 – 2008 Research Associate, Inst. Marine & Coastal Sci., Rutgers U., NJ

2001 – 2006 Principal GIS Analyst, Surface Water Management, Snohomish County, WA

1993 – 2001 Graduate Research Assistant, U. of Washington, Oceanography, Seattle

(c) Selected Publications or Products:

- 1. NANOOS Visualization System (NVS), http://nvs.nanoos.org
- 2. WikiWatershed ModelMyWatershed Application, https://modelmywatershed.org
- 3. Barth JA, Allen SE, Dever EP, Dewey RK, Evans W, Feely RA, Fisher JL, Fram JP, Hales B, Ianson D, Jackson J, Juniper K, Kawka O, Kelley D, Klymak JM, Konovsky J, Kosro PM, Kurapov A, Mayorga E, et al. 2019. Better Regional Ocean Observing Through Cross-National Cooperation: A Case Study From the Northeast Pacific. *Frontiers in Marine Science* 6:93, doi:10.3389/fmars.2019.00093
- 4. Hsu, L., E. Mayorga, J.S. Horsburgh, M.R. Carter, K.A. Lehnert and S.L. Brantley. 2017. Enhancing interoperability and capabilities of Earth Science data using the Observations Data Model 2 (ODM2). *Data Science Journal* 16(4):1-16, doi:10.5334/dsj-2017-004
- 5. Mayorga, E., T. Tanner, R. Blair, A.V. Jaramillo, N. Lederer, C.M. Risien and C. Seaton. 2010. The NANOOS Visualization System (NVS): Lessons learned in data aggregation, management and reuse, for a user application. *Proc. MTS/IEEE Oceans'10*, doi:10.1109/OCEANS.2010.5663792
- 6. Mayorga, E., S.P. Seitzinger, J.A. Harrison, et al. 2010. Global Nutrient Export from WaterSheds 2 (NEWS 2): Model development and implementation. *Environmental Modeling & Software* 25: 837-853, doi:10.1016/j.envsoft.2010.01.007

(d) Synergistic Activities:

- 1. University of Washington hackweeks co-organizer and tutorial developer: GeoHackWeek 2016 2019; OceanHackWeek 2018 present; WaterHackWeek 2019 present.
- 2. Mentored several undergraduates in environmental data processing and analysis projects.
- 3. Member of Pacific NW Louis Stokes Alliance for Minority Participation (LSAMP) UW Faculty Mentoring Committee, 2021.
- 4. Environmental Data Science Inclusion Network (EDSIN) community member, since 2020.
- 5. Northwest Association of Networked Ocean Observing Systems (NANOOS), the US Pacific Northwest Regional Coastal Ocean Observing System for the US Integrated Ocean Observing System (IOOS), 2009 2020. Data management lead, 2013 2019.
- 6. Ocean Networks Canada, International Science Advisory Board member, since 2018.

Lowell Jones, SPRH

Functional Specialties

- Workforce Planning & Employment
- Recrutiement and Sourcing
- HR Training & Development
- Employee & Labor Relations

Education & Certifications

B.Sc. - Virginia Polytechnic & State University (Virginia Tech), Blacksburg, VA

Pamplin College of Business

Human Resources/Entrepreneurship, Innovation, and Technology concentration

Business Development & Leadership Minor

Senior Professional in Human Resources® (SPHR®) Certification

Human Resources Certification institute (HRCI)

Professional Experience

Recruitment & Employee Development Manager - Applied Physics Laboratory, UW Sept 2020 to present

Seattle, WA

- Create and implement programs that attract, develop, and retain high quality employees as well as oversees programs which directly support the Laboratory's people-related strategies, and pertain to the recruitment, training and development, mentoring, and career advancement of engineering, technical, and administrative staff and postdoctoral scholars.
- Serves as the integral connection between APL (and UW) and prospective employees through outward-facing recruitment initiatives, as well as future scientists and engineers through outreach initiatives to undergraduate and youth.
- Manage and administer onboarding and mentorship programs for all staff, students, and postdoctoral scholars.

HR Business Partner/Administrator - Applied Physics Laboratory, UW

Seattle, WA

- Jan 2017 to Sept 2020
- Designed, implemented, and managed effective and efficient Human Resources policies, procedures, and programs that are compliant with evolving Federal, State, and University policy, regulations, and guidelines.
- Primary Workday implementation and utilization specialist within the laboratory and the Office of Research. Responsible for reporting, liaising, and optimizing the systems capabilities to for operational HR use.
- Review promotions, in-grade salary increases, reclassifications and other salary/position changes and make recommendations concerning their approval.
- Interface with internal research center leadership and UW central Human Resources in Employee Relations actions ensuring a positive outcome to work performance issues.
- Served as primary liaison with the International Scholars Office and Academic HR and assist APL Centers with visa and other foreign scientist/staff/visit immigration needs.

July 2014 - Jan 2017

- Lead the full program and processes recruitment of classified, permanent, and temporary employees
- Oversee all graduate and undergraduate appointment, hiring, promotional, and separation actions including research associates/post docs, research assistants, graduate students, undergraduate students, student helpers and interns.
- Assist the HR Director and individual APL Executive staff members in achieving strategic goals and personal and professional development objectives.
- Lead New Employee onboarding, UW Orientation, and integration into UW/APL environment and systems
- Interpret and administer all aspects of FMLA/family medical leave use

HR & Training Associate - University of Virginia

Feb 2013 - July 2014

Charlottesville, VA

- First point of contact for over 1300 employees supporting all levels of management in Energy & Utilities, Engineering, and UVA Hospital and Campus Operations on staffing, employee relations, classification, and FMLA/short-term disability/worker's compensation
- Responsible for on-going promotion of training development opportunities available internally and externally to the university by conducting need-specific trainings to supervisors, managers, and directors.
- Designed and facilitated yearly Leadership Forum, a 2-day event focused on training 200+ directors, managers, and front line supervisors in certain essential and rapidly changing human resources procedures so they were better equipped to navigate challenging situations in their role.
- Conducted Manager Enrichment sessions, which provided 50+ senior level managers and directors with opportunities for networking and leadership development designed to engage the participants and teach them new skills.

HR - Planning & College Recruiting Assistant - Norfolk Southern Corporation Norfolk, VA Aug 2011 - Dec 2011

- Managed candidate administration through the entire Norfolk Southern hiring process for Management Trainee and Operations Supervisor positions. Including market research, job posting, resume and application screening, generating spreadsheets and reports to track candidate data, assessment test administration, scheduling and coordinating career/interview day, interviewing, and offers.
- Coordinated office administration for traveling College Recruiting and HR Planning Asst managers.
- Responsible for contacting candidates, coordinating approved travel arrangements, event planning and execution of non-local career/interview sessions.
- Multi-tasked using specific subject knowledge to complete deadline driven special projects from other areas in HR such as, EEO, Benefits and Compensation, and Training and Development.

UW Service

- Office of Research Diversity, Equity, & Inclusion Committee
- Diversity Council
- HR Community of Practice Programming Committee
- Distinguished Staff Awards, DSA Selection Committee

Current Support

Investigator: Roxanne Carini

Project/Proposal Title: LiveOcean Model Enhancement and Transition to Operations
Source of Funding: National Oceanic and Atmospheric Administration (NOAA)

Sponsor Contact: Debra Esty, 240-533-9446, debra.esty@noaa.gov

Status: Current, Grant NA21NOS0120168

Prime Offeror/Subs: Univ. of Washington / None

PI/Technical Contact: Parker Maccready, Oceanography, Univ. of Washington

1503 NE Boat St, Box 357940, Seattle, WA 98195-7940 206-685-9588, Fax 206-543-6073, pmacc@uw.edu

Administrative Contact: Carol Rhodes, Sponsored Programs, Univ. of Washington

4333 Brooklyn Ave NE, Box 359472, Seattle, WA 98195-9472

206-543-4043, Fax 206-685-1732, osp@uw.edu

Total Award Amount: \$899,407

Period of Performance: 09/01/2021 - 08/31/2024

Person-Months per Year: Cal: 2.00, 2.75, 2.45 | Acad: | Sumr:

Project/Proposal Title: Sustaining NANOOS, the Pacific Northwest component of the US

IOOS

Source of Funding: National Oceanic and Atmospheric Administration (NOAA)

Sponsor Contact: Oriana Villar, 240-533-9466, oriana.villar@noaa.gov

Status: Current, Grant NA21NOS0120093

Prime Offeror/Subs: Univ. of Washington / None

PI/Technical Contact: Jan A. Newton, Applied Physics Lab, Univ. of Washington

1013 NE 40th Street, Box 355640, Seattle, WA 98105-6698

206-543-9152, Fax 206-543-6785, janewton@uw.edu

Administrative Contact: Carol Rhodes, Sponsored Programs, Univ. of Washington

4333 Brooklyn Ave NE, Box 359472, Seattle, WA 98195-9472

206-543-4043, Fax 206-685-1732, osp@uw.edu

Total Award Amount: \$20,670,035

Period of Performance: 07/01/2021 to 06/30/2026

Person-Months per Year: Cal: 4.6, 4.6, 4.6, 4.6, 4.6 Acad: Sumr:

Project/Proposal Title: UW Friday Harbor Labs Teaching/Instruction UW Friday Harbor Labs Academic Programs

Sponsor Contact: N/A **Status:** Current

Prime Offeror/Subs: Univ. of Washington

PI/Technical Contact: Roxanne Carini, Applied Physics Lab, Univ. of Washington

1013 NE 40th Street, Box 355640, Seattle, WA 98105-6698

206-685-8326, Fax 206-543-6785, rjcarini@uw.edu

Administrative Contact: N/A **Total Award Amount:** N/A

Period of Performance: 9/16/21 to 12/15/21

Person-Months per Year: Cal: 0.4 | Acad: | Sumr:

Project/Proposal Title: RVA-OA2-17, The Olympic Coast as a Sentinel: An Intergrated

Social-Ecological Regional Vulnerability Assessment to Ocean

Acidification

Source of Funding: National Oceanic and Atmospheric Administration (NOAA) **Sponsor Contact:** Dr. Erica Ombres, 301-734-1072, Erica.h.ombres@noaa.gov

Status: Current, NA17OAR0170166 AM01

Prime Offeror/Subs: Univ. of Washington/None

PI/Technical Contact: Jan Newton Applied Physics Lab, Univ. of Washington

1013 NE 40th Street, Box 355640, Seattle, WA 98105-6698 206-543-9152, Fax 206-543-6785, janewton@uw.edu

Administrative Contact: Carol Rhodes, Sponsored Programs, Univ. of Washington

4333 Brooklyn Ave NE, Box 359472, Seattle, WA 98195-9472

206-543-4043, Fax 206-685-1732, osp@uw.edu

Total Award Amount: \$700,000

Period of Performance: 09/01/2017 to 02/28/2022

Person-Months per Year: Cal: 0.7 (2021 to 2022) | Acad: | Sumr:

Pending Support Investigator: Roxanne Carini

Project/Proposal Title: NSF Convergence Accelerator Track E: Equipping Underserved

Communities with Ocean Intelligence Platforms

Source of Funding: National Science Foundation (NSF)

Sponsor Contact: Lara Campbell, 703-292-7049, LCampbel@nsf.gov

Status: Pending, Submitted Proposal **Prime Offeror/Subs:** Univ. of Washington / None

PI/Technical Contact: Jan A. Newton, Applied Physics Lab, Univ. of Washington

1013 NE 40th Street, Box 355640, Seattle, WA 98105-6698 206-543-9152, Fax 206-543-6785, janewton@uw.edu

Administrative Contact: Carol Rhodes, Sponsored Programs, Univ. of Washington

4333 Brooklyn Ave NE, Box 359472, Seattle, WA 98195-9472

206-543-4043, Fax 206-685-1732, osp@uw.edu

Total Award Amount: \$750,000

Period of Performance: 09/15/2021 - 09/14/2022 **Person-Months per Year:** Cal: 2.15 | Acad: | Sumr

Project/Proposal Title: Value of the Pacific Northwest HAB Forecast

Source of Funding: National Oceanic and Atmospheric Administration (NOAA)

Sponsor Contact: Felix A. Martinez, Ph.D.,734-741-2254, Felix.Martinez@noaa.gov

Status: Pending Revision

Prime Offeror/Subs: Woods Hole Oceanographic Institution/Sub: UW **PI/Technical Contact:** Ryan McCabe, JISAO, Univ. of Washington

4333 Brooklyn Ave NE, Box 359472, Seattle, WA 98195-9472

206-685-0599, Fax 2 (206) 685-3397, rmm@uw.edu

Administrative Contact: Carol Rhodes, Sponsored Programs, Univ. of Washington

4333 Brooklyn Ave NE, Box 359472, Seattle, WA 98195-9472

206-543-4043, Fax 206-685-1732, osp@uw.edu

Total Award Amount: \$201,022

Period of Performance: 09/01/2020-8/31/2023

Person-Months per Year: Cal: 0.00, 0.25, 0.25 | Acad: | Sumr:

Project/Proposal Title: DID-NOW: Developing an Inclusive and Diverse Naval

Oceanographic Workforce

Source of Funding: Office of Naval Research (ONR)

Sponsor Contact: Veronica Lacey, 619-221-5494 veronica.lacey@navy.mil

Status: Pending Proposal Submission (This Proposal)

Prime Offeror/Subs: Univ. of Washington / None

PI/Technical Contact: Andrew T. Jessup, Applied Physics Lab, Univ. of Washington

1013 NE 40th Street, Box 355640, Seattle, WA 98105-6698

206-685-2609, Fax 206-543-6785, jessup@uw.edu

Administrative Contact: Carol Rhodes, Sponsored Programs, Univ. of Washington

4333 Brooklyn Ave NE, Box 359472, Seattle, WA 98195-9472

206-543-4043, Fax 206-685-1732, osp@uw.edu

Total Award Amount: \$600,000

Period of Performance: 04/15/2022 - 04/14/2025

Person-Months per Year: Cal: 1.00, 0.5, 0.0 | Acad: | Sumr:

Current and Pending Support - Emilio Mayorga

Current Support:

Project/Proposal Title: Sustaining NANOOS, the Pacific Northwest component

of the US IOOS

Description: The primary mission of the user-driven NANOOS is to provide

PNW stakeholders with the ocean data, tools, and information they need to make responsive and responsible decisions, appropriate to their individual and collective societal roles.

Source of Support: National Oceanic and Atmospheric Administration

Award Number: NA16NOS0120019 **Person-Months per Year:** 3.45 Calendar Months **Period of Performance**: 06/01/16 - 05/31/22

Location of Project: University of Washington, Seattle, WA

Total Award Amount: \$56,500 (Mayorga)

Project/Proposal Title: Collaborative Research: CYBER Training: CIU: Data

Streams, Model Workflows, and Educational Pipelines for

Hydrologic Sciences

Description: Our vision is that cyberinfrastructure like HydroShare can be

effectively used to advance science of complex earth system processes by providing the software for model application and analytics, but more importantly, by facilitating a collective

exploration and interaction processes among users.

Source of Support: National Science Foundation

Award Number: 1829585

Person-Months per Year: 1.0 Calendar Months **Period of Performance:** 09/01/18 – 08/31/22

Location of Project: University of Washington, Seattle, WA

Total Award Amount: \$37,580 (Mayorga)

Project/Proposal Title: Biogeochemical Processes along the Lower Amazon River

Continuum

Description: This project, with a focus on the Amazon River, will provide

greater insights into how riverine carbon cycles function, and

ultimately their influence on global cycles.

Source of Support: National Science Foundation

Award Number: 1754317

Person-Months per Year: 3.4 Calendar Months **Period of Performance:** 06/01/18 - 05/31/22

Location of Project: University of Washington, Seattle, WA

Total Award Amount: \$83,179 (Mayorga)

Project/Proposal Title: Collaborative Conference: OceanHackWeek: A Workshop to

Explore Data Science in Oceanography

Description: Oceanhackweek aims to address the urgent need for

computational and data science skills by combining immersive tutorials on state-of-the-art data science methodologies, peer-learning, and on-site collaborative hack project work in a 5-day

intensive workshop.

Source of Support: National Science Foundation

Award Number: 2038697

Person-Months per Year: 0.15 Calendar Months **Period of Performance**: 08/01/20 - 08/31/22

Location of Project: University of Washington, Seattle, WA

Total Award Amount: \$42,487 (UW-APL)

Pending Support:

Project/Proposal Title: DID-NOW: Developing an Inclusive and Diverse Naval

Oceanographic Workforce (this proposal)

Description: This proposal

Source of Support: Office of Naval Research 1.0 Calendar Months **Period of Performance**: 04/15/22 – 04/14/25

Location of Project: University of Washington, Seattle, WA

Total Award Amount: \$37,247 (Mayorga)

BIOGRAPHICAL SKETCH: Andrew T. Jessup

(a) Professional Preparation

University of Michigan	Engineering Science	B. S. E.	1980
Massachusetts Institute of Technology	Civil Engineering	MS.E.	1988
Massachusetts Institute of Technology /	Oceanography and	Ph. D.	1990
Woods Hole Oceanographic Institution	Oceanographic Engineering		

(b) Appointments

University of Washington

2 3	8			
	Applied Physics Laboratory			
2005 - 2021	Chair, Air-Sea Interaction and Remote Sensing Department			
2000 - date	Senior Principal Oceanographer			
1995 - 2000	Principal Oceanographer			
1990-1995	Senior Oceanographer			
Academic				
2011 - date	Professor, Department of Civil and Environmental Engineering			
2002 - date	Affiliate Associate Professor, Department of Mechanical Engineering			
2000 - 2011	Affiliate Associate Professor, Department of Civil and Env. Engineering			
1992 - 2000	Affiliate Assistant Professor, Department of Civil and Env. Engineering			

(c) Publications – Five most recent

Branch, R. A., A. R. Horner-Devine, C. C. Chickadel, S. A. Talke, D. Clark, and A. T. Jessup (2021), Surface Turbulence Reveals Riverbed Drag Coefficient, *Geophy. Res. Let.*, 48(10).

Carini, R. J., C. C. Chickadel, and A. T. Jessup (2021a), Surf Zone Waves at the Onset of Breaking: 2. Predicting Breaking and Breaker Type, *J. Geophys. Res.-Oceans*, 126(4).

Carini, R. J., C. C. Chickadel, and A. T. Jessup (2021b), Surf Zone Waves at the Onset of Breaking: 1. LIDAR and IR Data Fusion Methods, *J. Geophys. Res.-Oceans*, 126(4).

Masnadi, N., C. C. Chickadel, and A. T. Jessup (2021), On the Thermal Signature of the Residual Foam in Breaking Waves, *J. Geophys. Res.-Oceans*, 126(1).

Thompson, E. J., W. E. Asher, A. T. Jessup, and K. Drushka (2019), High-resolution rain maps from an x-band marine radar and their use in understanding ocean freshening, *Oceanography*, 32(2), 58-65.

(d) Synergistic Activities

- 1. Community Outreach: Advisor, Engineers Without Borders (since 2017)
- 2. <u>Recruitment of Underrepresented Groups</u>: Recruited and supervised 3 female undergraduate student, 3 female graduate students, 4 female postdoctoral fellows, 5 female scientists (to date)
- 3. STEM Development: Chair of APL SEED Postdoctoral Program (2017-2020)
- 4. <u>Scientific Community Service</u>: Organizing Committee, 72nd Annual Meeting of the American Physical Society Division of Fluid Mechanics Meeting, Seattle, WA (2019)
- 5. <u>Scientific Community Service</u>: Review manuscripts for science journals and proposals for funding agencies (ongoing)

Current and Pending – Andrew Jessup

Current Support:

Project Title: RAPID: Simultaneous Remote Measurement of Skin and Sub-skin

Temperature for Ships, USVs, & Buoys

Summary: Development of IR radiometer system

Source of Support: National Science Foundation (NSF), OCE-2009985

Total Direct Costs: \$106,518

Percentage Effort Devoted to Project: 25%

Prime Offeror: Applied Physics Laboratory, University of Washington

Technical Contact: Andrew Jessup

1013 NE 40th Street, Box 355640

Seattle, WA 98105-6698

Phone: (206) 685-2609 Email: jessup@apl.washington.edu

Period of Performance: 1/1/2020 - 12/31/2021

Total Award Amount: \$117,007

Person-Months Per Year Committed to Project: 1.0

Relationship to the Proposed Effort and Degree of Overlap: None

Project Title: National Marine Renewable Energy Center Upgrades

Summary: Development of hydropower turbines

Source of Support: Department of Energy. DE-EE0008955

Total Direct Costs: \$4,824,380

Percentage Effort Devoted to Project: 5%

Prime Offeror: Department of Mechanical Engineering, University of Washington

Technical Contact: Brian Polagye

3900 E Steven Way NE, Box 352600

Seattle, WA 98195

Phone: (206) 543-7544 Email: bpolagye@uw.edu

Period of Performance: 4/1/2020 - 9/30/2021

Total Award Amount: \$5,000,000

Person-Months Per Year Committed to Project: 0.38, 0.13

Relationship to the Proposed Effort and Degree of Overlap: None

Project Title: Simultaneous Remote Measurement of Skin and Sub-skin Temperature

for USVs & Buoys

Summary: Development of IR radiometer system

Source of Support: National Science Foundation (NSF), OCE-2022750

Annual Direct Costs: \$289,811 / \$245,610 / \$118,668

Percentage Effort Devoted to Project: 10%

Prime Offeror: Applied Physics Laboratory, University of Washington

Technical Contact: Andrew Jessup

1013 NE 40th Street, Box 355640

Seattle, WA 98105-6698

Phone: (206) 685-2609 Email: jessup@apl.washington.edu

Period of Performance: 8/15/2020 - 7/31/2023

Total Award Amount: \$699,330

Person-Months Per Year Committed to Project: 1.0, 1.0, 1.5

Relationship to the Proposed Effort and Degree of Overlap: None

Project Title: Infrared Remote Sensing of Cooling Whitecap Foam to Quantify Wave

Breaking and Aeration

Summary: Exploitation of cooling foam signature to quantify dissipation due to

breaking waves

Source of Support: National Science Foundation (NSF), OCE-2048616

Annual Direct Costs: \$268,708 / \$185,892 **Percentage Effort Devoted to Project:** 5%

Prime Offeror: Applied Physics Laboratory, University of Washington

Technical Contact: C. Christopher Chickadel

1013 NE 40th Street, Box 355640

Seattle, WA 98105-6698

Phone: (206) 221-7673 Email: carmine@uw.edu

Period of Performance: 3/1/2021 - 2/28/2023

Total Award Amount: \$532,360

Person-Months Per Year Committed to Project: 0.5, 0.25

Relationship to the Proposed Effort and Degree of Overlap: None

Pending Support:

Proposal Title: DID-NOW: Developing an Inclusive and Diverse Naval Oceanographic

Workforce

Summary: This proposal

Source of Support: Office of Naval Research

Annual Direct Costs: \$114,864 / \$231,085 / \$201,788

Percentage Effort Devoted to Project: 5%

Prime Offeror: Applied Physics Laboratory, University of Washington

Technical Contact: Andrew Jessup

1013 NE 40th Street, Box 355640

Seattle, WA 98105-6698

Phone: (206) 685-2609 Email: jessup@apl.washington.edu

Period of Performance: 4/15/2022 - 4/14/2025

Total Award Amount: \$600,000

Person-Months Per Year Committed to Project: 0.40, 0.25, 0.0

Relationship to the Proposed Effort and Degree of Overlap: This proposal

See Form SF424 Project Abstract